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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,438	08/22/2006	Raphael Teysseire	126551	1310

25944 7590 02/27/2009
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EXAMINER	
BAUMSTEIN, KYLE	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
02/27/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,438	TEYSSEIRE, RAPHAEL	
	Examiner	Art Unit	
	KYLE BAUMSTEIN	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/10/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-19, 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Speier et al. (US Pat. 6403175).

Regarding claims 1, 6, and 11-16, 22, and 23 the instant application claims a primer composition comprising a compound comprising isocyanate-reactive groups for the preparation of which the following are used

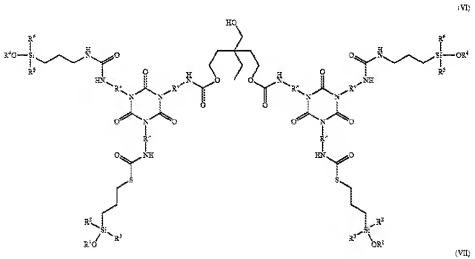
a. A polyisocyanate having at least 3 isocyanate groups

b. At least one silane having the formula as shown

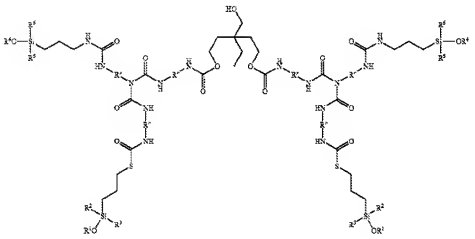
c. A cross-linking agent having at least three isocyanate-reactive functional groups.

The composition is claimed to be essentially free from isocyanate and it is claimed that the cross-linking agent having at least three isocyanate-reactive functional groups has functional groups selected from SH, OH, NH, or NH_2. It is further claimed that the cross-linking agent is a polyol having a OH-equivalent weight of 30-350 g/eq and a molecular weight of 90-500 g/mol. The addition of a catalyst if also claimed.

The primer is claimed to be the product of the reaction of the cross-linking agent and an intermediate of the reaction between the silane and the polyisocyanate and is further claimed to have either formula (VI) or (VII):



(VI)



(VII)

Speier et al. teach a process for producing surface-sealed glass containers using a coating composition comprising a trialkoxysilane and a water-soluble mixture of a polyol and a crosslinker (col. 2, line 58-62). Suitable examples of the trialkoxysilane include 3-aminopropyltrimethoxysilane, 3-aminopropyltriethoxysilane, and 3-

aminopropylmethyldiethoxysilane; these compounds are also listed in the specification of the current application as suitable silanes to be used in the claimed invention. The crosslinker as disclosed in the prior art is a polyisocyanate composition (col. 7, line 54). Examples of such include isocyanurates of simple diisocyanates, which would have three isocyanate groups (col. 8, line 35). Listed as an example of an acceptable isocyanate is the reaction product of simple diisocyanates with polyhydric alcohols including trimethylolpropane (col. 8, line 30-32). The use of trimethylolpropane is listed as a cross-linking agent in the specification of the instant application. Therefore, it is assumed that this embodiment in Speier et al. would provide a compound that is substantially similar to that as claimed in the instant application and would meet the limitations as claimed in claims 13 and 14. The examiner takes the position that the composition as disclosed in Speier would have a structure as claimed in claims 16, 22, and 23 regardless of the order of addition of the components. The prior art discloses the use of an isocyanurate of a simple diisocyanate and the product of a simple diisocyanate and a polyol. The reaction between trimethylolpropane and hexamethylenediisocyanate isocyanurate followed by a limited amount of the silane compound would give the structure (VI) as claimed in the instant application.

Regarding claims 7 and 8 the applicant claims the use of an isocyanurate of one or more diisocyanates and more specifically, an isocyanurate of an aliphatic diisocyanate. As previously mentioned, Speier et al. disclose the use of polyisocyanates based on isocyanurates of simple, aliphatic diisocyanates including the linear hexamethylenediisocyanate (col. 8, line 35-37).

Regarding claims 9 and 10 the applicant claims the primer composition wherein the silane is a trialkoxy silane and more specifically, a trimethoxysilane. A preferred silane compound as disclosed in Speier et al. is 3-aminopropyltrimethoxysilane.

Regarding claims 17 and 18, the instant application claims the addition of a coupling agent, particularly a trialkoxy silane. The applicants further claim the addition of said coupling agent as a trialkoxy silane carrying primary amino groups. Being that the prior art discloses the use of amino-functionalized trialkoxysilanes, the examiner takes the position that the addition of more of this/these compound(s) would act as the additional coupling agent.

Regarding claim 19, applicant claims the use of a catalyst in the composition. Speier et al. states that in addition to the components as disclosed, the invented composition may comprise conventional auxiliaries such as catalysts (col. 3, line 25-27).

Regarding claim 24, the instant application claims the method of using the aforementioned primer composition as a primer for adhesives, sealants, or floors. Being that the claimed invention of Speier et al. is a "process for producing surface-sealed hollow glass containers... (Title)," the examiner takes the position that the coating as claimed in the prior art is used as a sealant.

Regarding new claim 27, the prior art teaches the aforementioned use of trimethylolpropane. Said polyol has free isocyanate-reactive alcohol groups.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-5, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speier et al. (US Pat. 6403175).

Regarding claims 2-5, the instant application claims the primer composition as mentioned above characterized in that at least another silane is used for producing said compound. The compound is claimed to be trialkoxysilane and further claimed to be a thiol-, amino-, or hydroxy-functionalized trimethoxysilane.

Speier teaches the aforementioned composition wherein suitable silane compounds include 3-aminopropyltrimethoxysilane as well as 3-mercaptopropyltrimethoxysilane. While the prior art discloses the use of just one silane compound in the composition, it has been found that "the combination of two compositions, each of which is taught by prior art to be useful for the same purpose, in order to form a third composition that is to be used for the very same purpose may be prima facie obvious." (See *In re* Kerkhoven, 205 USPQ 1069 (CCPA 1980). Therefore, it would have been obvious to expect that a composition comprising a combination of alkoxysilane compounds as disclosed in Speier would have similar properties as the compound that is disclosed in the prior art.

Regarding claims 25 and 26, the instant application claims a method characterized in that the composition as described above is applied by means of brush, felt, cloth or sponge on a substrate manually or automatically or by means of robots. Furthermore, the method is characterized in that the substrate is glass or glass ceramics.

Speier teaches the use of the aforementioned coating composition as a liquid sealant to be applied to the surface of hollow glass containers in a conventional manner (col. 11, line 66-col. 12, line 1). The examiner takes the position that it is common knowledge to use a brush to apply a liquid coating composition to a substrate. Using a brush to paint on a substrate has been known to the public for millennia. It would have been obvious to one having ordinary skill in the art to apply the composition as taught by Speier using a brush as this is a conventional method for applying coatings.

Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speier et al. (US Pat. 6403175) as applied to claims 1-19 and 22-26 above, and further in view of Ryan et al. (US Pat 5342867).

The instant application claims the aforementioned primer composition wherein, in addition to the primer compound, a solvent which does not react with isocyanates at room temperature is present. Also claimed is the presence of fillers in the composition. Speier teaches a similar composition to that as claimed in the instant application, yet does not teach the use of solvents or the addition of fillers in the composition.

Ryan teaches an alkoxy silane-based primer for various substrates including glass. The reference discloses that the reaction of polyisocyanate and silane starting materials is normally conducted in the absence of solvent. However, in order to modify the viscosity of the working mixture, an inert organic solvent may be used. Therefore, it would have been obvious to have added an inert solvent to the composition as taught by Speier so as to increase the decrease the viscosity, resulting in a coating that could be easily applied to a given substrate.

Ryan discloses the use of fillers in the coating composition and states that the addition of such compounds can be useful in some applications so as to impart thixotropic properties to the formulations (col. 7, line 54-63). Therefore, it would have been obvious to one having ordinary skill in the art to have added such fillers to the composition as taught by Speier so as to create a coating composition that is easily applied yet difficult to remove from a substrate.

Claims 1 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blum et al. (WO00/59974).

US Pat. 6762241 to Blum et al. is used as an English equivalent of the German WIPO document.

Blum teaches polyurethane solutions containing alkoxysilane structural units. The invented polyurethane compositions are the reaction products of a five components including at least one at least difunctional polyol, at least one at least difunctional polyisocyanate, and at least one compound containing at least one alkoxysilane group

and an isocyanate-reactive group (col. 2, line 58-col. 3, line 4). Suitable polyol components can include polyester polyols that are prepared from higher than difunctional alcohols and acids such as trimethylolpropane and trimellitic acid (col. 4, line 29-34). Such a component functions as the crosslinking agent having at least three isocyanate-reactive functional groups claimed in the instant application. Suitable isocyanate compounds to be used in the invented composition include polyisocyanates which are known having isocyanurate structural groups (col. 5, line 50-54). Such compounds have three isocyanate groups. Alkoxysilanes to be used in the invented composition include 3-aminopropyltriethoxysilane and 3-aminopropyltrimethoxysilane among others (col. 7, line 15-17). Although these components are listed as suitable embodiments for each component among other similar compounds, it would have been obvious to one having ordinary skill in the art to have used any combination of the listed compounds to prepare the invented composition. Furthermore, being that the composition disclosed in Blum is prepared in the absence of water, it is analogous to that as claimed in the instant application.

Response to Arguments

Applicant's arguments filed 11/10/2008 have been fully considered but they are not persuasive. Applicants argue that the composition taught by Speier is not substantially similar to that as claimed in the instant application due to the presence of water, blocked isocyanates, and a different method of preparation. The Office respectfully disagrees for the following reasons.

Although the composition disclosed in Speier is taught as a water-based coating composition, said composition does not require the use of an excess of water. The prior art states that the composition can be prepared by admixing the silane composition with as little as 0.5 mol of water per mol of alkoxysilanes used (col. 6, line 30-34). The use of a less than stoichiometric amount of water will yield a composition in which the alkoxysilane moieties are not all hydrolyzed. Therefore, the examiner maintains that the alkoxysilane composition, as claimed in the instant application, will exist in the invented coating composition. Furthermore, the instant application claims a composition comprising the elements listed. The use of such language does not preclude the presence of the hydrolyzed organosiloxane compound in the coating composition.

Applicants argue that the prior art's use of blocked isocyanates as the crosslinker yields a composition that is not anticipatory of the composition claimed in the instant application. However, upon crosslinking, the isocyanate will become unblocked and will react with the amino terminus of the silane-containing compound, thereby yielding a composition having the same structure as claimed in the instant application. Furthermore, new claim 27 is directed to the state of the isocyanate-reactive functionalities, not the isocyanate functionalities.

Regarding applicants' arguments directed to the limitations of claim 15, the examiner respectfully disagrees. Claim 15 is drawn to a composition. Due to this, any process limitations are regarded as just that. The use of an intermediate as claimed in the instant application is merely a process limitation in a composition claim. Therefore, although the process by which the composition invented by Speier was prepared may

not be the same as claimed in the instant application as long as the resulting compositions are the same, the instant claims are still anticipated by the reference.

Applicants argue that Speier does not teach the composition claimed in the instant application due to the lack of the use of two silane compounds in concert. However, claim two states the use of another silane compound having the same variables as the silane compound of claim one. Being that the claim does not specifically recite the use of a different silane, the silane that functions as that of claim 1 can be the same as that in claim 2.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYLE BAUMSTEIN whose telephone number is (571)270-5467. The examiner can normally be reached on First Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KBB/

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796